

Custom Patches

The resurgence of patches in the embroidery world is plainly evident. While these little perfectly edged pieces of embroidery are currently en vogue, you might very well find that making custom patches can be very rewarding, fun, and very easy to do with your embroidery machine. Whether you are trying to get your foot in the door to impress your customer or you just need to make one patch, this technique will work for most patch applications.

There are many ways to create a patch, and the following technique is perfectly suited to experimentation and prototyping. It can be used for one-offs or multiple runs, and it can be adapted for patches of nearly any size or shape your machine will allow. This technique is similar to an applique process in many ways and will hopefully feel familiar and achievable very quickly. Enjoy the process and have fun with it!

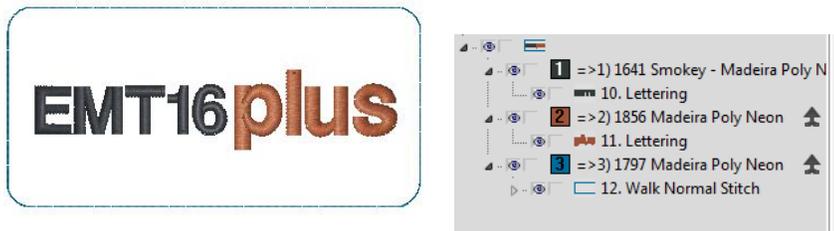
What you will need:

- Embroidery Design for the patch
- Embroidery Software
- Fabric for patch – for this example we are using faux leather
- Temporary Spray Adhesive
- Cut-away backing
- Embroidery Thread
- Embroidery Hoop
- 12-gauge clear vinyl (available at most fabric stores)
- Heat Press / Iron
- Heat Sensitive Adhesive
- Fabric Scissors
- Copy paper

Step 1 – Setting Up and Sewing the Main Design

- A. Using your embroidery design software, create your patch design. In the example in this article we are using the Melco EMT16 PLUS embroidery machine and Melco DesignShop embroidery software. The patch design will be the EMT16 PLUS logo.
- B. Add a walk normal stitch to the end of the design. This will give you the shape of your custom patch and sewing it last will alleviate the majority of any distortion from the embroidering of the design. The outline may be in any shape you want, but simpler shapes like the shape of a circle, square or rectangle (see below) are easier to execute cleanly. In general, you will want the dimensions of the patch border to be at least 3/4 "to 1" larger than the dimensions of the design you want to put on the patch.

Tip: You can use the Melco DesignShop automatic shape tool for exact shapes for you patch outline.



Example of what your custom patch design will look like in Melco's DesignShop Software.

- C. Hoop an appropriate stabilizer and patch fabric together in hoop. If you are making multiple patches you can use a larger hoop and make more than one at a time.



D. Embroider your design and outline stitch in the hoop.



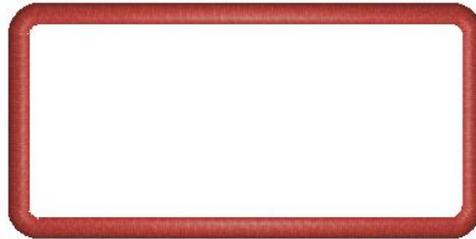
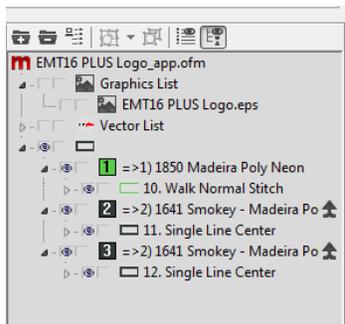
E. Remove your patch fabric from the hoop and using a good quality sharp pair of scissors cut out your design exactly on the outline stitch so you get the exact shape of the patch.



Step 2 – Setting Up the Outline Design

- A. Using your embroidery design software, delete the patch design so that you just have the outline stitch left.
- B. Use the walk stitch from the design for your applique placement stitch.
- C. Create a zigzag stitch using the walk stitch as a guide (you can use “change element type” in Melco’s DesignShop Software to do this (level dependent)).
 - a. The Single line width = 30pt or 3mm
 - b. Custom = offset is 20% or 80% (depending on how it was digitized, the majority of the width to the inside of the shape)
- D. Create a satin stitch border using the walk stitch from above. You can copy and paste the zigzag stitch and simply change it to at satin stitch.
 - a. The Single line width = 45pt or 4.5mm
 - b. Custom = offset is 25% or 75% (depending on how it was digitized, the majority of the width to the inside of the shape)
- E. You should have 3 elements on top of each other in your design – see below

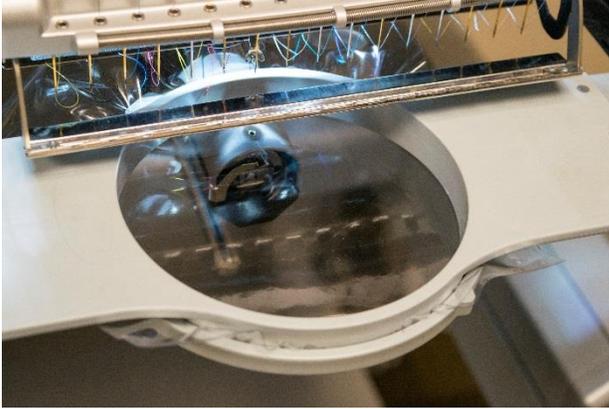
Tip: You can copy and paste these elements so you get the exact shape for all three.



Step 3 - Sewing the Outline Design

- A. Hoop a piece of clear vinyl (12 gauge is what we are using). The vinyl is used to give you a free clean edge for the satin stitch outline for the patch. Be careful, some vinyl comes with a woven back and that will not work. Look for the vinyl that we all remember as a protective covering of some loved one’s floral print sofa. THAT’s the vinyl we’re after. You can usually find it in the upholstery section of a general fabric store.

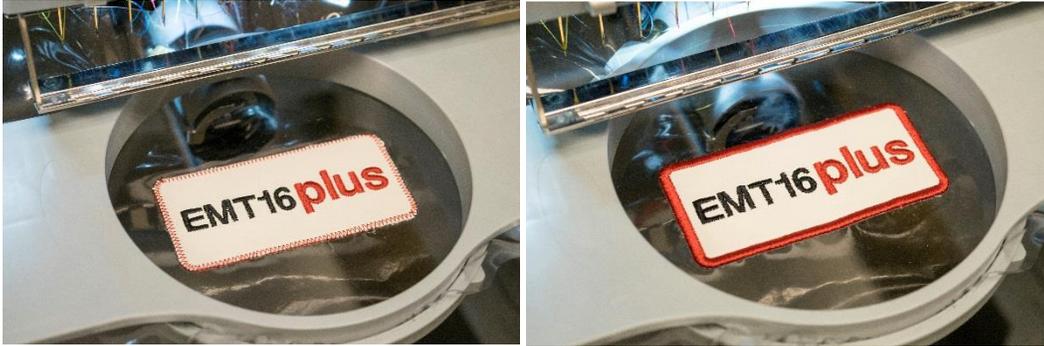
Tip: For a more unified finish to your patch outline you may want to consider matching the color of the bobbin thread to your top thread.



- B. Load your applique patch outline design in the machine operating system.
- C. Program the color sequence with an applique stop after the first color (this is your applique placement stitch).
- D. Now you're ready to trace the design and start sewing!
- E. The next step is to embroider the placement stitch on the vinyl.
- F. The programmed applique stop after the first color will cause the machine to stop and allow you to place your cut out patch onto the vinyl...you will need to spray it with adhesive spray and smooth your patch fabric on top to keep it in place.



- G. The next stitch to sew is the zigzag tack down stitch to hold the patch in place. Then the satin stitch outline. The zigzag and satin stitch are usually the same color of thread.

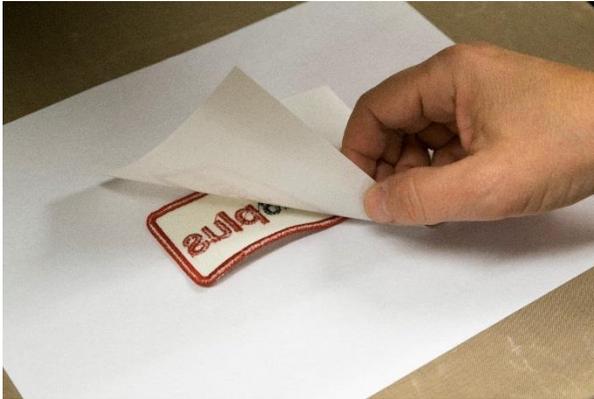


- H. Once the patch is finished, punch out the patch. Make sure to peel the back vinyl off the back of the patch before you add your adhesive backing.



Step 4 – Applying Heat-Sensitive Adhesive to the Back of the Patch

- A. Using a heat press or a hot iron, use the manufacturer’s heat and time recommendations for your heat-sensitive adhesive to apply a layer of adhesive to the back of the patch. You may find it useful to sandwich the patch face down between a couple of pieces of plain paper. The bottom piece of paper will allow the adhesive to be applied all the way to the edges of the patch without the extra glue adhering to any undesired surfaces. The top piece of paper will prevent extra adhesive getting on the hot platen surface.



- B. Once the adhesive has been applied and just slightly cooled, peel the paper backing off the adhesive.
- C. Peel the patch off the paper leaving the excess glue behind.



- D. Clean up the edges of the patch by peeling off any bits of the adhesive sticking to the edges of your new patch.



You can now attach your new patch to a product or provide it to your customer with instructions on attaching it. Use a hot iron or heat press with a pressing cloth or an equivalent to attach the patch to your hat or garment. For products that cannot handle the heat or will not willing form to a heat press, the patches can be sewn onto the product like any traditional patch.



The design and creation of unique patches and embroidered badges is currently presenting exciting opportunities to the savvy embroiderer. With this quick and simple technique in your repertoire, you will have the tools to take full advantage of those wonderful opportunities.

Happy sewing from The Melco Applications Team!